

WHAT IS CLAIMED IS:

1. An electronic device connecting method comprising:  
     mounting an electrode of an electronic device closely on a sheet-like porous member having a hole, the porous member having a photosensitive layer, which produces or eliminates an ion exchange group by irradiation with energy beams, on a surface in the hole of the porous member;  
     selectively irradiating a predetermined region of the porous member, on which the electronic device is mounted, with energy beams to form a latent image in an irradiated or non-irradiated portion of the porous member, the predetermined region including a portion close to the electrode;  
     after irradiating with the energy beams, filling a conductive material in a hole in the latent image of the porous member to form a conductive portion; and  
     bonding the porous member, in which the conductive portion is formed, to the electronic device.
  
2. An electronic device connecting method as set forth in claim 1, wherein the mounting comprises pressure sensitive adhesion.
  
3. An electronic device connecting method as set forth in claim 1, wherein  
     the photosensitive layer produces or eliminates an ion exchange group in an irradiated or non-irradiated portion of the photosensitive layer of the porous member to form a pattern of an ion exchange group by the energy beams, and  
     the conductive portion is formed by selectively absorbing a conductive material or its precursor onto the pattern of the ion exchange group which is formed in the irradiated or non-irradiated portion of the photosensitive layer.

4. An electronic device connecting method as set forth in claim 3, further comprising ;  
electroless plating by using the conductive material or its precursor as a plating nucleus.

5. An electronic device connecting method as set forth in claim 1, wherein the conductive portion comprises a region which passes through the porous member, and a region which does not pass through the porous member.

6. An electronic device connecting method as set forth in claim 1, wherein the bonding comprises curing after a curing resin impregnates the porous member.

7. An electronic device connecting method comprising:  
fixing a sheet-like porous member having a hole to a carrier sheet by pressure sensitive adhesion, the porous member having a photosensitive layer which produces or eliminates an ion exchange group by irradiation with energy beams, on a surface in the hole of the porous member;

selectively irradiating a predetermined region of the porous member with energy beams to form a latent image in an irradiated or non-irradiated portion of the porous member;

after irradiating with the energy beams, mounting an electrode of an electronic device closely on the porous member, and peeling the carrier sheet off to transfer the electronic device to the porous member;

filling a conductive material in a hole in the latent image of the porous member after the electronic device is transferred; and

bonding the porous member after the conductive portion is formed to the electronic device.

8. An electronic device connecting method as set forth

in claim 7, wherein the mounting comprises pressure sensitive adhesion.

9. An electronic device connecting method as set forth in claim 7, wherein

the photosensitive layer produces or eliminates an ion exchange group in an irradiated or non-irradiated portion of the photosensitive layer of the porous member to form a pattern of an ion exchange group by the energy beams, and

the conductive portion is formed by selectively absorbing a conductive material or its precursor onto the pattern of the ion exchange group which is formed in the irradiated or non-irradiated portion of the photosensitive layer.

10. An electronic device connecting method as set forth in claim 9, further comprising ;  
electroless plating by using the conductive material or its precursor as a plating nucleus.

11. An electronic device connecting method as set forth in claim 7, wherein the conductive portion comprises a region which passes through the porous member, and a region which does not pass through the porous member.

12. An electronic device connecting method as set forth in claim 7, wherein the bonding comprises curing after a curing resin impregnates the porous member.

13. An electronic device connecting method comprising:  
fixing a sheet-like porous member having a hole to a first carrier sheet by pressure sensitive adhesion to arrange the porous member on the first carrier sheet, the porous member having a photosensitive layer, which produces or eliminates an ion exchange group by irradiation with

energy beams, on a surface in the hole of the porous member;  
arranging an electronic device having an electrode  
on a second carrier sheet so as to expose the electrode;  
synchronously feeding the porous member and the  
electronic device, and peeling the porous member off from  
the first carrier sheet to fix the porous member to the  
electronic device by pressure sensitive adhesion;

selectively irradiating a predetermined region of  
the porous member with energy beams to form a latent image  
in an irradiated or non-irradiated portion of the porous  
member;

after irradiating with the energy beams, filling  
a conductive material in a hole in the latent image of the  
porous member to form a conductive portion; and

bonding the porous member, in which the conductive  
portion is formed, to the electronic device.

14. An electronic device connecting method as set forth  
in claim 13, wherein

the photosensitive layer produces or eliminates an  
ion exchange group in an irradiated or non-irradiated  
portion of the photosensitive layer of the porous member  
to form a pattern of an ion exchange group by the energy  
beams, and

the conductive portion is formed by selectively  
absorbing a conductive material or its precursor onto the  
pattern of the ion exchange group which is formed in the  
irradiated or non-irradiated portion of the photosensitive  
layer.

15. An electronic device connecting method as set forth  
in claim 14, further comprising ;  
electroless plating by using the conductive material or  
its precursor as a plating nucleus.

16. An electronic device connecting method as set forth

in claim 13, wherein the conductive portion comprises a region which passes through the porous member, and a region which does not pass through the porous member.

17. An electronic device connecting method as set forth in claim 13, wherein the bonding comprises curing after a curing resin impregnates the porous member.

18. An electronic device connecting method comprising:  
fixing a sheet-like porous member having a hole to a first carrier sheet by pressure sensitive adhesion to arrange the porous member on the first carrier sheet, the porous member having a photosensitive layer, which produces or eliminates an ion exchange group by irradiation with the energy beams, on a surface in the hole of the porous member;

arranging an electronic device having an electrode on a second carrier sheet so as to expose the electrode;

selectively irradiating a predetermined region of the porous member with energy beams to form a latent image in an irradiated or non-irradiated portion of the porous member;

after irradiating with the energy beam, synchronously feeding the porous member and the electronic device, and peeling the porous member off from the first carrier sheet to fix the porous member to the electronic device by pressure sensitive adhesion;

filling a conductive material in a hole in the latent image of the porous member to form a conductive portion;  
and

bonding the porous member, in which the conductive portion is formed, to the electronic device.

19. An electronic device connecting method as set forth in claim 18, wherein

the photosensitive layer produces or eliminates

an ion exchange group in an irradiated or non-irradiated portion of the photosensitive layer of the porous member to form a pattern of an ion exchange group by the energy beams, and

the conductive portion is formed by selectively absorbing a conductive material or its precursor onto the pattern of the ion exchange group which is formed in the irradiated or non-irradiated portion of the photosensitive layer.

20. An electronic device connecting method as set forth in claim 19, further comprising ;  
electroless plating by using the conductive material or its precursor as a plating nucleus.

21. An electronic device connecting method as set forth in claim 18, wherein the conductive portion comprises a region which passes through the porous member, and a region which does not pass through the porous member.

22. An electronic device connecting method as set forth in claim 18, wherein the bonding comprises curing after a curing resin impregnates the porous member.